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May 11, 2005

**EX PARTE**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

RE: **WC Docket No. 04-36, In the Matter of IP-Enabled Services**

This letter responds to requests from the Commission for further explanation of the steps Verizon is taking to provide Voice-over-Internet-Protocol (VoIP) service providers and their vendors the ability to use Verizon's Enhanced 911 emergency calling system to connect VoIP customer 911 calls to Public Safety Answering Points (PSAPs).

Verizon strongly supports the Commission's decision to address the enhanced 911 capabilities of VoIP services. Verizon is committed to public safety issues and will continue to work with VoIP providers and the industry to develop new and better solutions for these technologies.

**Background:** Today, VoIP providers that offer customers nomadic capability (i.e., ability to use the service from any broadband access point) or the option to select non-geographically relevant telephone numbers (such as Verizon's VoiceWing service) offer an emergency response service that can be reached by the customer dialing 911. However, that service does not provide certain capabilities of 911 or E911 service. For example, the service does not generally provide a call-back number (Automatic Numbering Identification or ANI) or the caller's address (Automatic Location Information or ALI) to the person who answers the 911 call.

When a customer orders VoiceWing service, he or she is required to provide a service address, which Verizon indicates should be the location at which the customer will be using the phone. As explained in more detail below, Verizon uses this address to identify the appropriate PSAP to send a particular emergency call to when a customer

dials 911. Verizon also notifies the customer that he or she must update the service address if that customer uses the service at a different location.

When a VoiceWing customer dials 911 today, a query is generated to a third party database that correlates the customer's service address to the appropriate PSAP for that address. The call is then routed over the PSTN to an "administrative line" at that PSAP. The administrative line may not be operated by a trained call-taker, and the administrative line does not provide call-back number or location information to the person who answers the call. *See* Diagram 1. These calls are not being routed directly through the existing 911/E911 system because, among other reasons, the selective routers cannot recognize a telephone number that is not geographically associated with that PSAP.

**New York City Solution:** For months, Verizon has worked with the New York Police Department, the New York Department of Information Technology and Telecommunications (which manages the New York City PSAP), the New York Public Service Commission, Vonage, Intrado, and the New Jersey Board of Public Utilities to develop a means to route 911 calls by VoIP customers through the existing E911 system to trained call-taker positions in the PSAP and to provide the PSAP with customer address and call-back number information for these calls. These parties have agreed upon an interim solution that will provide E911 capabilities to VoIP customers in New York City by this summer.

This interim solution has two components. First, Verizon will lease facilities to a VoIP provider or a third party vendor, such as Intrado, to connect from a point of presence in the New York City LATA (established by the VoIP provider or the third party vendor) directly to Verizon's selective routers. These facilities will be Feature Group D access trunks leased pursuant to Verizon's access tariffs.

To date, Vonage and Intrado have contacted Verizon about leasing these facilities in New York City. Verizon stands ready to allow any other VoIP provider or vendor to make the same arrangements.

Verizon will assign an account manager to any VoIP provider or vendor interested in ordering access facilities to guide them through the process of obtaining the necessary industry codes (Carrier Identification Code and Access Customer Name Abbreviation), and the ordering and provisioning process for obtaining trunks.

Second, Verizon is willing to enter into contracts with parties that will provide the PSAP with VoIP end user location information. In New York City, Verizon is currently negotiating a contract with Intrado that will provide Intrado with a port on the ALI database and the necessary "pseudo-ANI" (or pANI) for Intrado to manage E911 database queries for VoIP providers. The ALI database contains records that associate a wireline calling party's telephone number with his or her physical location. For wireless end users and end users of a VoIP service that offers nomadic capability or the option to

select non-geographically relevant telephone numbers, the customer's physical location is contained in records in a third-party database connected to the ALI database. The pseudo-ANI is geographically related to the New York City PSAP, so that the selective router will recognize it. It also signals the ALI database to direct the query to the appropriate third party database (often referred to as "ALI steering") which in turn provides the information (including call back number and customer address) that assists the PSAP in determining where to refer the request for emergency services.

The attached Diagram 2 illustrates how a 911 call will be routed using this solution. After the customer dials 911, the call signal will travel to a softswitch, which will recognize the call as a 911 call and "dip" into Intrado's database (which appears on Diagram 2 as the VPC or Virtual Positioning Center). The Intrado database will assign a pseudo-ANI to the 911 call and provide the information necessary to route the 911 call to the New York City selective router by way of an Intrado gateway. The call will then be routed to the New York City PSAP with the pseudo-ANI. The PSAP will query the ALI database, and the port will "steer" the query to the Intrado database. The database will then correlate the pseudo-ANI to the actual ANI and to the ALI associated with the VoIP end user's registered service address and transmit the telephone or callback number (ANI) and the location information (ALI) to the PSAP call taker.

Verizon expects that by this summer, VoIP providers and their vendors will be able to provide their customers in New York City with E911 service. If the New York City model is successful, it will be a useful model for other locations. The timetable for nationwide deployment of this interim solution will depend on the coordination and action of several industry segments, VoIP providers, third party vendors such as Intrado and TCS, LECs who manage E911 systems, and the PSAP community. Those actions will include deployment of POPs in each LATA, ordering and provisioning of access trunks to connect those POPs to selective routers, and negotiations between third party vendors and VoIP providers.

For example, although Verizon is committed to providing its VoiceWing customers with E911 capability, its ability to do so will depend on a number of factors. Since VoiceWing has customers nationwide and, more importantly, because customers are able to use the service from any broadband access point, VoiceWing would need to enable this type of solution at every PSAP in the country. For economic and efficiency reasons, VoiceWing will likely contract with third party vendors, such as Intrado, to provide this functionality. Those vendors will need to establish points of presence in every LATA in the country, order and provision trunks to connect each POP in each LATA to selective routers, and arrange for ALI steering to retrieve VoIP end user information. We understand that these vendors are still developing their deployment plans and do not yet have firm schedules for implementing this solution outside of New York .

Verizon looks forward to working closely with the Commission and the industry to ensure that VoIP customers have access to E911 services as soon as possible.

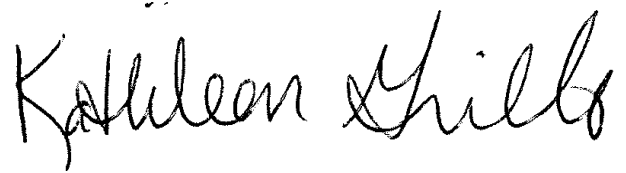
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Please feel free to contact me directly if you have any questions or if you need more information.

Sincerely,

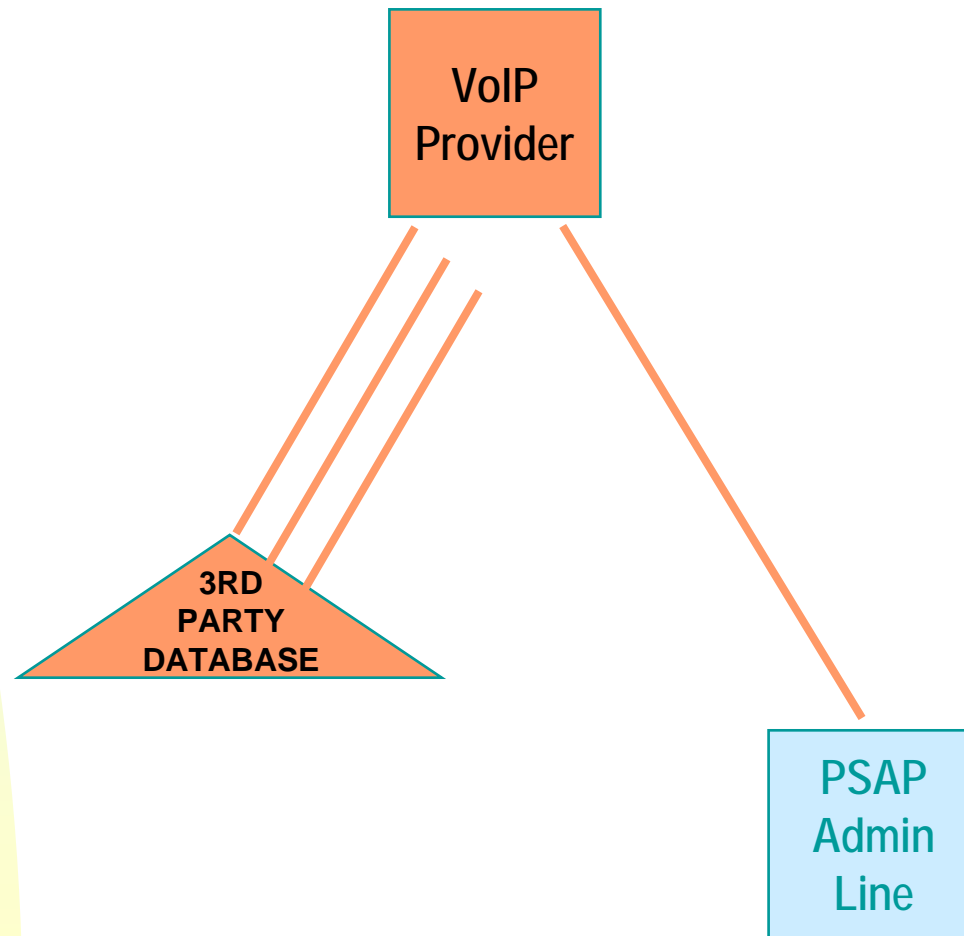
A handwritten signature in black ink that reads "Kathleen Grillo". The script is cursive and fluid, with the first name and last name clearly distinguishable.

Kathleen Grillo

Attachment

cc: Michelle Carey  
Tom Navin  
Julie Veach  
Christi Shewman

# Current VoIP 911



# VoIP E911

## *The "CMRS" Solution*

